

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

8120.2A CHG 12

5/14/97

SUBJ: PRODUCTION APPROVAL AND SURVEILLANCE PROCEDURES

- 1. <u>PURPOSE</u>. This change is issued to replace all references of Order 8130.2 for the selection and appointment of designees with Order 8130.28, Airworthiness Designee Management Program.
- 2. <u>DISTRIBUTION</u>. This change is distributed to Washington headquarters branch levels of the Flight Standards Service, Aircraft Certification Service, and the office of Aviation System Standards; to the branch levels in the regional Flight Standards Divisions and Aircraft Certification Directorates; to all Flight Standards District Offices; to all Aircraft Certification Offices, Aircraft Certification Field Offices; to all Manufacturing Inspection District and Satellite Offices; to the Aircraft Certification and Airworthiness Branches at the FAA Academy; to the Suspected Unapproved Parts Program Office; to the Brussels Aircraft Certification Division and Flight Standards Staff; and all International Aviation Field Offices.
- 3. <u>DISPOSITION OF TRANSMITTAL</u>. After filing the attached pages, this change transmittal should be retained.

PAGE CONTROL CHART

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principal facility and all associate facilities using the same quality control system approved by the FAA, for the particular type certificated product(s).

- b. The PC is issued to the principal manufacturing facility which control the design and quality of the product(s) for which the approval was granted. The principal facility address will be listed under the "business address" and all associate facility addresses will be listed under "manufacturing facilities" on the FAA Form 8120-4, Production Certificate. A "mail box" address is not acceptable for a facility since the actual location must be identified. Such addresses, however, may be used as supplemental to the actual address when desired for such uses as corresponding to and from FAA offices.
- c. When FAA surveillance is indicated at an associate facility located within the United States, but outside the geographical area of the district office in which the PC is located, the PI will arrange for surveillance in accordance with the procedures contained in chapter 17.
- d. When a PC holder moves the principal manufacturing facility to a new location, the PC is no longer effective since a PC is not transferable (reference FAR 21.155). If the PC holder wants a PC for the new location, the PC holder must reapply in accordance with FAR 21.133.
- e. When the PC holder moves an associate facility or adds a new plant, the FAA must be notified of such changes in accordance with FAR 21.147. The new plant or moved facility must be subjected to a satisfactory district office or QASAR audit, as appropriate, before the facility can be approved for production. The PC must also be amended to reflect this change.
- f. When the associate facility is producing a complete product as specified on the production approval and demonstrates compliance with FAR part 21, they should be encouraged to apply for a separate production approval for that facility. This would serve to simplify FAA administration procedures and provide for better service to the manufacturer, especially when the facility is located in another district or directorate.
- 25. DESIGNATED MANUFACTURING INSPECTION REPRESENTATIVES or ORGANIZATIONAL DESIGNATED AIRWORTHINESS REPRESENTATIVES (ODAR). A PAH is eligible to have qualified employees designated as DMIRs in accordance with the provisions of FAR*part 183. Order 8130.28, Airworthiness Designee Management Program contains procedures for the administration of DMIRs. Also, a PAH may be authorized to represent the Administrator as an ODAR, as provided for in Order 8130.28.

26. FAA SURVEILLANCE.

a. GENERAL. All manufacturers which hold an FAA production approval are subject to FAA surveillance. FAA surveillance is conducted by mandate, as specified in the FA Act of 1958, which requires that inspections be conducted at the point of manufacture. This serves to ensure that holders of FAA production approvals manufacture each product/part thereof in conformity with the FAA-approved design. It is, therefore, the

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responsibility of the manufacturing inspection function to conduct any surveillance necessary to ensure that these manufacturers (including any supplier facilities) remain in compliance with those pertinent rules which govern the manufacture of their particular products/parts thereof. The manufacturing inspection function is also responsible for identifying any unsatisfactory conditions and for ensuring that prompt, corrective actions are taken when necessary. When it has been determined that a manufacturer has a poor compliance history and/or extensive services difficulties/Airworthiness Directives or compliance history, or when the manufacturer does not have an adequate self-audit procedure in place, the manufacturer should be subjected to more stringent surveillance.

- b. Certificate Management Responsibilities. A principal manufacturing inspector should be assigned to each PC holder to manage the surveillance of all aspects of the PC holder's QC system. The PI having CM responsibility will conduct surveillance as appropriate to ensure that the PC holder's QC system has been established and is being maintained in accordance with the provisions of FAR 21, Subpart G. The standards to be used in conducting surveillance are defined in paragraph 159.b. Primary functions under CM responsibility include:
- (1) Initial approval/evaluation of QC data and any changes to the QC system which may effect the inspection, conformity, or airworthiness of the product. (The PI should advise the PC holder within 30 days of receipt as to whether or not a revision is acceptable; reference appendix 7 for a sample letter.)
- (2) Evaluation of inspection/quality assurance provisions of manufacturing and special processes and subsequent revisions.
- (3) Conducting compliance/conformity inspections on prototype and production products and parts thereof, as necessary.
 - (4) Training, monitoring, and supervising DMIRs.
 - (5) Issuance of airworthiness and export approvals as necessary.
- (6) Providing guidance and assistance to the certificate holder as necessary.
- (7) Investigation of service difficulties which involve QC problems in accordance with chapter 10 and Order 8010.2, Flight Standards Service Difficulty Program.
- (8) Investigation of regulatory violations in accordance with Order 2150.3, "Compliance and Enforcement Program," as necessary.
- (9) Ensuring that appropriate corrective actions have been taken for all unsatisfactory conditions cited against the particular manufacturer.
- (10) Determining the need for audits and making the arrangements for such audits.

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45. TESTING-AIRCRAFT, ENGINES, PROPELLERS. Each person who produces a completed product (except rocket engines) under FAR 21, Subpart F, must flight test and/or functional test that product in accordance with the requirements of FARs 21.127, 21.128, or 21.129, as appropriate.

- a. Aircraft. Each aircraft produced under FAR 21, Subpart F, both prior to and subsequent to the issuance of an APIS, must be flight tested in accordance with an approved production flight test procedures and flight checkoff from the requirements of FAR 21.127.
- b. Engines and Propellers. Each engine and propeller produced under FAR 21, Subpart F, both prior to and subsequent to the issuance of an APIS, must be subjected to an acceptable test run or functional test in accordance with the requirements of FAR 21.128 or 21.129, as appropriate.

46. TC HOLDER'S RESPONSIBILITY UNDER FAR 21, SUBPART F.

- a. Prior to the issuance of an APIS, a person who produces a product on which he holds a TC or license is responsible for complying with FARs 21.123, 21.127, 21.128, 21.129. and 21.130, as appropriate for the particular product involved.
- b. Subsequent to the issuance of an APIS, he is additionally responsible for maintaining the APIS in accordance with FAR 21.125 to ensure that each product conforms to the type design and is in a condition for safe operation. The manufacturer must also comply with any terms or conditions as prescribed in his APIS approval letter.
- c. A TC holder or licensee is also responsible for reporting any failures, malfunctions, and defects as required by FAR 21.3.
- d. All products manufactured under the provisions of FAR 21, Subpart F, must be marked in accordance with the requirements of FAR 45.
- 47. <u>FACILITY LOCATION</u>. The same basic guidance as contained in par. 24 should be used, as applicable.
- 48. DESIGNATED MANUFACTURING INSPECTION REPRESENTATIVES. The holder of an APIS is eligible to have qualified employees designated as DMIRs in accordance with the provisions of FAR part 183. Order 8130.28, Airworthiness Designee Management Program contains procedures for the administration of DMIRs. Also, a PAH may be authorized to represent the Administrator as an ODAR, as provided for in Order 8130.28.

49. SURVEILLANCE.

a. Assignment of Principal Inspector. A PI should be assigned to each APIS holder to manage the surveillance of all aspects of the APIS. The PI assigned this responsibility will conduct ongoing surveillance, as appropriate, to ensure that the holders remains in compliance with the requirements of FAR 21, Subpart F. The CM functions for which the PI will be responsible are those identified in paragraph 26, as applicable. The standards to be used in conducting surveillance are defined in paragraph 159.b.

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b. Audits. Subsequent to the issuance of an APIS, all audit activity at the holder's facility will be accomplished in accordance with chapter 14 procedures.

- c. Inspection System Data. Whenever an APIS applicant elects to submit inspection data as evidence of compliance with FAR part 21, Subpart F, these data will be submitted to the cognizant district office for evaluation in accordance with the criteria contained in paragraph 159. When these data have been found acceptable, the statement, as reflected in appendix 10, page 3, item 11, should be included in the APIS's authorization letter. Any subsequent revisions to these data should be approved by the PI prior to implementation. The APIS holder should be notified within 30 days of receipt of any revised data as to whether or not it is acceptable. The sample letter in appendix 7 should be used for this notification.
- For am, "should be followed for noncompliance to FAR 21, Subpart F and FAR 45 prior to and after the issuance of the APIS. Additionally, enforcement procedures should be followed for any violation against FAR 21.125 subsequent to the issuance of the APIS. These procedures do not apply to noncompliances to a written description of a production inspection system (when submitted by a manufacturer) since there are no regulatory requirements for such data. Refer to paragraph 27 for additional guidance, as applicable, relative to enforcement actions.
 - 51. <u>SUPPLIER SURVEILLANCE</u>. Refer to chapter 8 for supplier surveillance methods.
 - 52.-57. RESERVED.

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(5) Once the TSOA is issued, the approved QC data becomes the basis for ensuring continuing compliance with the provisions of FAR 21, Subpart O. Subsequent revisions to these data must be submitted by the TSOA holder to the district office to determine compliance with FAR Section 21.143. The PI should advise the TSOA holder within 30 days of receipt as to whether or not the revision(s) comply with FAR Section 21.143 (refer to Appendix 7, for an example letter).

c. The foregoing procedures also apply to subsequent revisions or actions to a TSOA. In these instances, special attention should be given to any changes in QC procedures, manufacturing and special processes, etc., to ensure that they are adequate for the particular article to be produced.

73. FACILITY APPROVAL AUDIT.

- a. Prior to the original issuance of a TSOA, the district office will conduct an audit of the applicant's facility, including any suppliers as appropriate, to determine whether or not the applicant is in compliance with FAR 21, Subpart O. The results of these audits will be submitted to the ACO within the deadline established by the ACO.
- b. When determined necessary, the PI will conduct or make arrangements for an audit for any subsequent revisions or additions to the TSOA, or when the manufacturer expands or relocates facilities.
- 74. TSOA LETTER OF AUTHORIZATION. Upon a showing of compliance with FAR 21, Subpart O, a letter will be issued by the cognizant ACO in accordance with established procedures. This letter should be amended, as appropriate, to reflect subsequent additions to a manufacturer's original TSOA.

75. TSOA HOLDER'S RESPONSIBILITY.

- a. A TSOA holder is responsible for complying with all of the requirements contained in FAR 21, Subpart O, including the reporting requirements contained in FAR 21, Section 21.3 and the general rules as specified in FAR Section 21.607 and any terms or conditions prescribed in the TSO Letter of Authorization.
- b. A TSOA holder is also responsible for ensuring that only those articles which meet the applicable TSO performance standards are identified as required by FAR Section 21.603. In the case of spare parts produced for installation in a TSO article, the PI should suggest to the TSO holder that when the holder ships spare parts, a statement should be included in the invoice which identifies the TSOA article on which the spare part can be installed.
- 76. TSOA HOLDER'S FACILITY LOCATION. The same basic guidance contained in paragraph 24 should be followed as applicable.
- * 77. DESIGNATED MANUFACTURING INSPECTION REPRESENTATIVES or ORGANIZATIONAL DESIGNATED AIRWORTHINESS REPRESENTATIVES (ODAR). The holder of a TSOA is eligible to have qualified employees designated as DMIRs in accordance

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with the provisions of FAR part 183. Order 8130.28, Airworthiness Designee Management Program contains procedures for the administration of DMIRs. Also, a PAH may be authorized to represent the Administrator as an ODAR, as provided for in Order 8130.28.

78. SURVEILLANCE.

- a. Assignment of PI. A principal manufacturing inspector should be assigned to each TSOA holder to manage all aspects of the TSOA. The PI assigned this responsibility should conduct surveillance as appropriate to ensure that the holder remains in compliance with the QC requirements applicable to that particular manufacturer (reference paragraph 78.b). The PI is also responsible for those functions identified in paragraph 26 as applicable).
- b. Quality Control Requirements. Although QC system/data requirements vary (dependent on the year the authorization was issued), FAA surveillance is applicable to all manufacturers who produce articles under the TSOA system. It is, therefore, the PI's responsibility to determine which quality requirement/regulations were in effect on the date each particular authorization was issued and conduct surveillance accordingly. There are two general categories of authorizations as described below:
- (1) Manufacturers that hold an FAA Letter of Acceptance or TSOA issued before July 1, 1962, are required to have QC data in order to produce the particular article(s) in conformance with the standards which were applicable for the particular article(s) on the date that the Letter of Acceptance and/or TSOA was issued. These manufacturers were not and are not now required to submit QC data to the FAA, but must make these data available to the FAA upon request. In addition, these manufacturers must comply with the requirements of FAR Sections 21.3, 21.607 through 21.615, and 21.619 through 21.621 as required by FAR Section 21.603.
- (2) Manufacturers which hold a TSOA issued after July 1, 1962, are required to have a QC system and QC data as necessary to produce the particular article(s) in conformance with the standards which were applicable for the particular article(s) on the date the TSOA was issued. These manufacturers were/are required to submit their QC data to the FAA along with their application. In addition, these manufacturers must comply with the requirements FAR Sections 21.3, 21.607 through 21.615, and 21.619 through 21.621 as required by FAR Section 21.603.
- c. Audits. All audit activity will be accomplished in accordance with chapter 14 procedures.
- 79. ENFORCEMENT ACTIONS. Order 2150.3, "Compliance and Enforcement Program," should be followed for any violation. Refer to paragraph 27 for additional guidance as applicable relative to enforcement actions.
- 80. SUPPLIER SURVEILLANCE. Refer to chapter 8 for supplier surveillance methods.